

NUCLEAR DIVISION NEWS

a newspaper for employees of the nuclear division • union carbide corporation

UNION
CARBIDE

Vol. 9/No. 1 January 5, 1978

New Year's resolutions...

Roll out good intentions for '78

As 1977 rolls to a stop, many persons use New Year's resolutions to pave the way for another year. In laying down a road of resolutions, we not only have a path to follow for 1978, but we also smooth over the broken promises and unresolved resolutions of the previous year.

Pessimists define resolutions as "good intentions—bricks which pave the road to Hell." Optimists, however, use them as building blocks to Heaven.

In chartering their courses for 1978, some Nuclear Division employees have made New Year's resolutions. The following are some they were willing to share:

Lynda Hawkins, secretary in ORNL's Physics Division, vows to start broadening her horizons by learning more about other divisions at ORNL. She wants to know what the overall goals and objectives of ORNL are, and the role of each division in reaching these goals.

Hawkins' second resolution concerns child abuse. "I realize child abuse is a growing national problem, and I'd like to help organize a group to combat it on a local level."

Another worthwhile aim is voiced by **Howard Douglas**, an electrician in the Fabrication and Maintenance Division at Paducah:

"My 1978 New Year resolution is to abide by all safety rules for myself and working companions."

Another ambitious goal has been set by **Laura Walker**, Y-12 Recreation: "I plan to pay up all my bills in 1978, then buy only when I can pay cash...either that or do without!"

One positive and two negatives are stressed in **Henry N. Knott's** resolution. Knott is a mechanic in Paducah's Process Maintenance Department.

"I resolve to stop smoking, get rich, and not to run over any more deer!"

The superintendent of Plant Engineering at PGDP, **W. C. Taylor**, expects his resolution to pay dividends.

"I resolve to be nice to everyone and not make any derogatory or caustic remarks about anything or to anyone. By the way, I am looking forward to a quiet year."

Robin Arms, Y-12 Guard Department, sets a goal we might all aspire to:

"To see things as they really are, and not what they should be...or what I would like them to be."

After the Christmas holidays and the eating binges which usually accompany them, **Kenneth R. Davis'** resolution came as a surprise: "I'd like to gain some weight...20 pounds would do for starters."

Davis, a janitor in ORNL's Operations Division, would also like to save money next year for "a home in the country—complete with cows and some dogs."

From Machine Design Engineering at ORGDP comes **Sherman Matthews** with a yen to "make my Pinto last another year."

Fred M. Pickering, Y-12 Receiving, came up with an original resolution.

"Put me down as not making any! I found out years ago that all resolutions were good for is to break...so I resolve not to make any."

(Please see Page 8)

PIA interest rates increased for '78

The effective annual interest rate for the Personal Investment Account of the Savings Plan has been increased to 8.85% for the calendar year 1978. This rate will apply to all money in the Fixed Income Fund, not just to money added during the year. The rate for 1977 was 8.70%.

To assist participants in their investment plans, a guaranteed minimum rate for the following four years will be announced in mid-1978.

More information is available through your Benefit Plans representative.



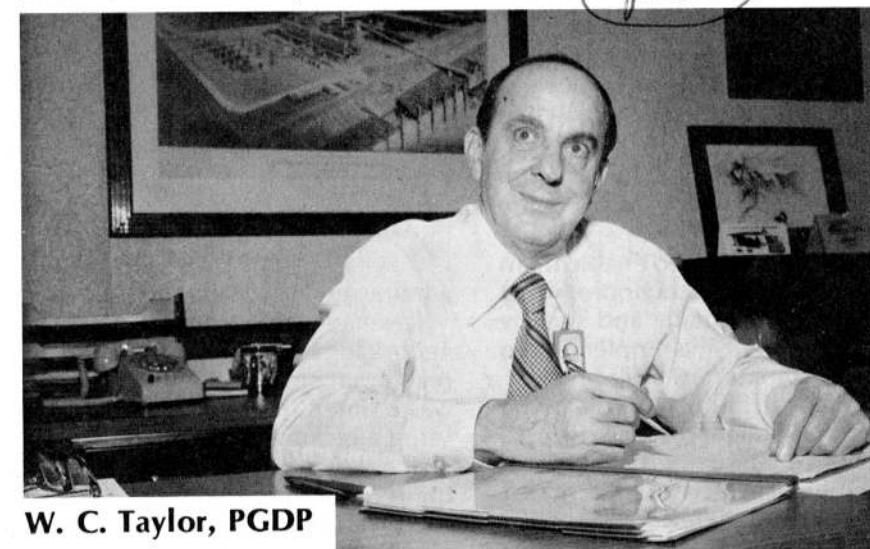
Robin Arms, Y-12



Sherman Matthews, ORGDP



Ken Davis, ORNL



W. C. Taylor, PGDP

Life Sciences program. . .

'Synfuels' technologies

by K. Robin Poole

A novel approach to nonnuclear energy research currently is being conducted among nine ORNL divisions through the Life Sciences Synthetic Fuels Program. The program is actually a cluster of research projects all designed to deal with the potential health and environmental effects of synthetic fuels (synfuels) technologies.

The program's roots lie in the nation's need for more sources of available energy. As national supplies of oil and natural gas are depleted, more attention is being directed to the vast supplies of coal throughout the country.

While coal and other fossil fuel conversion represent a potential source of energy relief, the environmental and health problems associated with them must be addressed.

The first real efforts to deal with these problems began at ORNL in 1975 when a "balanced program planning" approach to coal conversion was established confirming management's belief that an interdisciplinary program would bring about the best solutions.

Carl W. Gehrs spearheaded the initial efforts and was named coordinator of the formal Life Sciences Synthetic Fuels Program in 1976. Ken Cowser currently serves as program coordinator.

"We realized early that attainment of the program's goals would require a systematic framework in which the talents of many persons across the Laboratory could be drawn together to function effectively as a whole," Gehrs said. Consequently, employees from nine ORNL divisions participate in the program's research.

The divisions are: Analytical Chemistry, Biology, Chemical Technology, Computer Sciences, Energy, Environmental Sciences, Health, Health and Safety Research, and Information.

'When we develop a technology today we look at more than what it costs.'

The nature of the problems has determined the need for an interdisciplinary approach. "When we develop a technology today, we look at more than what it costs," said Gehrs. "We need new, viable energy sources, but at the same time we are faced with a very strong emphasis on developing environmental and health protection measures to match the new technologies.

Research in the synfuels program has been designed to provide information to developers early enough in the process to enable them to develop an energy technology that will be environmentally and socially acceptable when it is implemented on a large commercial scale.

Time plays an important role in the program's two major research thrusts. First, the biomedical and environmental effects of a particular technology under development are usually examined concurrently. For

example, current research is exploring the potential problems of a synfuels facility in terms of its hazards, both to workers and to the environment.

Second, predictive tools for the long-term effects of a synfuels economy also are being developed. Gehrs points out that research to determine the long-term effects on the environment of chronic low-level releases of synfuels waste products is difficult to fit into a technological time frame.

To be able to make predictions of these long-term results, wastes produced by the technology must be screened and their components identified. Then, information on metabolism, mechanisms of effect, transport phenomena and ultimate fate in the environment, including man, must be obtained for these components.

Nine ORNL divisions contribute to the research effort.

A major research effort at the Laboratory involves the identification of carcinogenic (cancer-causing) and/or mutagenic (mutation-causing) compounds in synfuels waste. Among the most significant of these are the polycyclic aromatic hydrocarbons (PAH's), which are known carcinogens.

Analytical chemists under Mike Guerin have been working to characterize and prepare samples of products and wastes from synfuels plants for biological analysis. Their work involves reducing complex materials to more simple, testable substances.

The Biology Division receives samples of these materials and tests them for biological activity. The biologists, coordinated by Jim Epler and Mike Holland, use a battery of short-term assays to determine mutagenic and possible carcinogenic potential. Additional tests are made on mammalian cells and on experimental animals to help determine the potential risk of these compounds to man.

In the Environmental Sciences Division, ecologists study such things as the effects of synfuels wastes on terrestrial vegetation, fish and other aquatic life, with the goal of determining potential environmental effects of coal conversion facilities. And in Computer Sciences, mathematical models are being developed which project how the different compounds that make up the wastes will interact. Steve Herbes and J. J. Beauchamp have found, for example, that some compounds are less toxic when mixed together as an effluent than they are when administered individually.

Researchers in the Chemical Technology Division are testing a bio-reactor that removes PAH's from waste water. In other studies, they are using a bio-reactor in which bacteria "eat" very toxic phenols, reducing them to harmless materials.

Synfuel technology poses problems for industrial hygienists and



INSPECTS FRUIT FLIES—Bobbie Brewen inspects fruit flies (*Drosophila*) for such genetic damage as altered eye color. These insects are the offspring of flies that were exposed to coal-derived chemicals. This work is being performed by the Biology Division's Comparative Mutagenesis Unit under Carroll Nix.

medical personnel as well, because exposure of workers to harmful materials in a synfuels facility is difficult to control. PAH's, for example, are often airborne and may penetrate human skin, increasing the risk of cancer. Because of the widespread concern for the potential problem of worker exposure, medical personnel are creating a detailed outline for continual surveillance of workers' health.

Finally, the Energy and Information Divisions are generating materials on synfuels technology. Since federal funds are involved in the construction of demonstration coal conversion facilities, environmental impact statements must be written for

them. The Energy Division's project, headed by Chuck Boston, will help DOE draft environmental impact statements for synfuels plants.

The PAH Problem has been discussed in a two-volume technical document, "Environmental, Health and Control Aspects of Coal Conversion," edited by Helen Braunstein, Emily Copenhaver and Helen Pfuderer for the Information Division.

This combination of talent and expertise from various disciplines at ORNL is developing a complete picture of the environmental and health implications of synfuels technologies.

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PADUCAH

Darlene MacPherson, Bell 208

Dan Robbins named director of ORNL Information Division

G. Daniel Robbins has been appointed director of the Information Division at ORNL. Robbins, head of ORNL's Office of Professional and University Relations since 1974, succeeds H. F. McDuffie, who is leaving his administrative responsibilities to return to research on a full-time basis.

A native of North Carolina, Robbins received his B.S. degree in chemistry from the University of North Carolina, Chapel Hill, and the M.S. and Ph.D., also in chemistry, from Princeton University.

After a year as a Fulbright Fellow at the Technical University of Norway, he joined the ORNL staff in 1967 to conduct research in the Reactor Chemistry Division on electrical transport properties in molten salts.

Beginning in 1972, he coordinated Ph.D. recruitment for ORNL and the Nuclear Division before being named to the Office of Professional and University Relations in 1974.

In this assignment Robbins has been responsible for overall Laboratory employment and its university-relations programs, involving some 600 faculty and student research guests at ORNL each year. He was chairman in 1975 of the task force which prepared ORNL's Long-Range Plan for Human Resources. For the past two years, he also has participated on a half-time basis in a Nuclear Division-wide personnel planning assignment.

He has served on Oak Ridge Associated Universities' University Programs Advisory Committee; as ORNL representative on the board of the National Consortium for Minority Graduate Degrees in Engineering, Inc.; and as chairman of the Laboratory's selection panels for the Wigner Fellowship Program and the Internal Sabbatical Program.

Robbins and his wife, Eva, live at 14 Brookside Drive, Oak Ridge. They have two children, Eva and Rickard.

HOLIDAYS FOR 1978

Holiday scheduling for Nuclear Division employees gives us all long weekends, with the exception of Independence Day, which falls on Tuesday this year.

The following holidays will be observed:

January 2
February 20
March 24
May 29
July 4
September 4
November 23
and 24
December 25
and 26

New Year's
Presidents' birthdays
Good Friday
Memorial Day
Independence Day
Labor Day

Thanksgiving

Christmas

Porter heads Industrial Hygiene

The appointment of Walter E. Porter as head of the Industrial Hygiene Department at ORNL has been announced by A. S. Garrett, M.D., director of the Health Division. The former associate department head, Porter is succeeding Newell E. Bolton, who has been named associate director of Industrial Hygiene for Union Carbide Corporation.

In this new assignment, Porter will ensure that significant chemical and physical stresses are identified, evaluated and controlled to prevent adverse health impacts on employees.

Porter joined the Nuclear Division in 1965 as an associate biologist in the Biology Division, then transferred to the Y-12 Plant's Radiation Safety Department as an associate health physicist from 1966 to 1969. In 1972 he joined ORNL's Industrial Hygiene Department as a health physicist and was named associate department head in 1975.

He served as a corporate industrial hygienist for the Reynolds Metals Company, Richmond, Va., from 1970 to 1972, and taught science at Oak Ridge High School from 1961 to 1965.

Porter received a B.S. in education, majoring in natural science, from the University of Tennessee in 1961; an M.S. in biology from the University of Mississippi in 1965; and a Master of Public Health degree in environmental health from the University of Michigan in 1970.

Porter's professional honors include an American Board of Industrial Hygiene certification in the comprehensive practice of Industrial Hygiene, a diplomate of the American Academy of Industrial Hygiene (AAIH), and president of the Tennessee Valley Section of the American Institute of Industrial Hygiene. He was elected to the Board of Councillors of AAIH in 1977, and is a member and past chairman of the Biohazards Committee, American Industrial Hygiene Association.

Porter and his wife, Kate, live on Beechwood Lane, Clinton. They have three children: Carol, Walter Jr. and Mary Kate.

division death...

Christal O. Mayo, a fire truck driver in the Paducah Employee Relations Division, died December 18, at the Western Baptist Hospital. A native of New Site, Miss., Mr. Mayo joined Union Carbide in 1952. The Mayo home is at Route 2, Paducah.

He is survived by his wife, Bertie; mother, Maude Mayo; a daughter, Shirley Keeling, also an employee at the Paducah Plant; two brothers, Delnus and Aaron; a sister, Bernice Stronge; and two grandchildren.

Services were held at Lindsey's Funeral Home with burial in Maple Lawn Cemetery.



Mr. Mayo

anniversaries...

PADUCAH

25 YEARS

Charles W. Turok, Donald A. Hussey, Mary P. Andrews, Charles V. Allen, Jack T. Crawford, Russell L. Martin, Estle A. Emery, Thomas E. Emerson, Otis S. Brittain, Floy E. Hoskins, William T. McCaig, Orville Almon, David Mills and Donald L. Bennett.

Y-12 PLANT

30 YEARS

Walter A. Sherrod, Materials Shop; Cledith E. Davis, Building Services Department.

25 YEARS

Burnice Foriest, Claude A. Boy, Homer F. Clayton, Harold L. Perdue, Herman L. Holsopple Jr., Gerald E. Carden, Wayne W. Wright, Daniel D. Keith, John E. Patt, William A. Wilburn, Herbert H. Martin, Jackie L. Minton, James M. Cunningham, John P. Gibson Jr. and James C. Rogers.

20 YEARS

Denton E. Littleton, Marshall B. Biddix, Q. V. Leinart, Earl R. Hinton, Kay F. Dutton and Roy C. Alley.

ORGDP

25 YEARS

Michael S. Haurilak, Wallace G. Billingsley, Daniel T. Robinson, Lamar C. Toomer, James T. Hill and Richard B. Schappel.

ORNL

30 YEARS

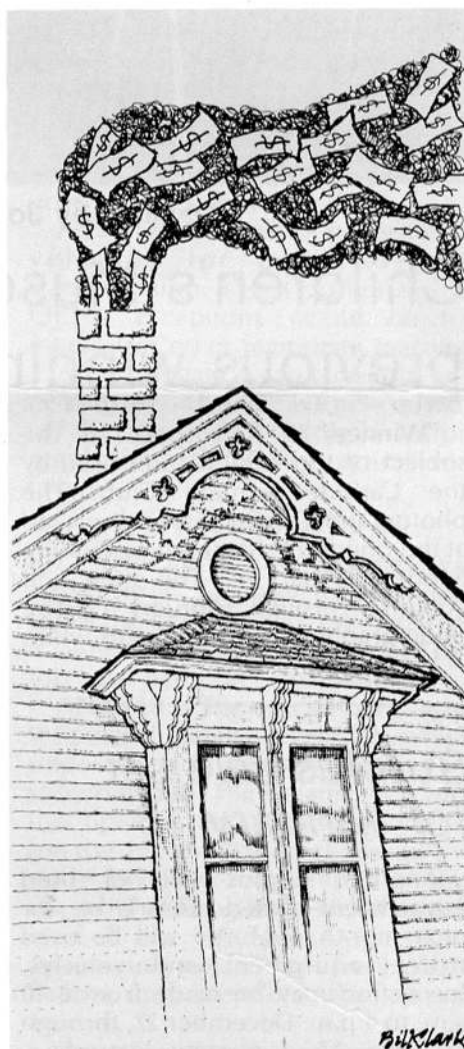
William F. Buker, Plant and Equipment; and William G. Cobb, Engineering.

25 YEARS

Walter L. Hyatt, Allen B. Eldridge, David O. Campbell, Hazel C. Duggan, Joseph P. Eubanks and Leo R. Stinnett.

20 YEARS

Frank D. Elsea, Kenneth E. Kirksey, Natalie E. Tarr, Coy J. Ward, Donald R. Davis, Woodie L. Belk, Joan W. Goodman, Orville R. Walker, Robert E. Atkins and Joe E. Arwood.



DON'T

LET THOSE DOLLARS
GO UP IN SMOKE!

KEEP YOUR HEATING
THERMOSTAT TURNED
DOWN.....

68° DURING THE DAY
55° AT NIGHT

about people . . .



Maurer



Conrad

Don I. Maurer and **M. Clark Conrad** are the latest Paducah Plant engineers to reach the status of professional engineer. Maurer is a design engineer and Conrad a chemical engineer in the Environmental Department. Both have been with Union Carbide five years.



Skinner



Auerbach

Stanley I. Auerbach, director of the Environmental Sciences Division ORNL, has been named to President Carter's Committee on Health and Ecological Effects of Increased Coal Utilization. The committee was established in October by the National Institute of Environmental Health Sciences in accordance with the President's National Energy Plan. Its purpose is to study and evaluate scientific data and make appropriate recommendations to the President and the Secretary of Health, Education and Welfare concerning the health and ecological effects of increasing the production and use of coal as an energy source.

Auerbach is currently chairman of the Board of Environmental Consultants for the Corps of Engineers' Tennessee Tombigbee Waterway Project, and serves as an adjunct professor at the University of Tennessee-Knoxville and the University of Georgia-Athens.

Dorothy M. Skinner, a staff member in ORNL's Biology Division, has been elected to a four-year term as one of four members-at-large of the Biological Sciences Section Committee of the American Association for the Advancement of Science (AAAS).

With 22,000 members, the Biological Sciences Section is the largest of the 21 sections that make up the AAAS. The Section Committee acts as a steering group for the Section.

Skinner, who holds a B.S. degree from Jackson College (Tufts University) in Medford, Mass., and a Ph.D. from Harvard University, joined the Biology Division in 1966. She is also a professor at the University of Tennessee—Oak Ridge Graduate School of Biomedical Sciences.



Tyer



Russell

Mabel E. Tyer, employee relations representative in Y-12's Employee Relations Division, has been named to the Office Administration Advisory Committee for the University of Tennessee's College of Business Administration. In that position, she will make recommendations relative to the school's curriculum, both for the present and for future needs. Other representatives from industry and education will serve with her on the committee. Tyer, a 33-year Union Carbide veteran, has been in Employee Relations 15 years. A native of Paducah, she is a Certified Professional Secretary and is an active member of the National Secretaries Association.

Joe Frank Russell, an electrician in Paducah's Fabrication and Maintenance Division, recently completed the master's program in industrial technology at Murray State University. He utilized Union Carbide's Educational Assistance Program throughout the courses. Russell holds a B.S. in agriculture from MSU, and joined Union Carbide in 1975. He is a charter member of the Society of Manufacturing Engineers, and previously served as chairman of the Agriculture Department at the Anson Technical Institute.



'Daisies' by John Blankenship

Children's Museum displays previous winning photographs

"Winners in Retrospect" is the subject of the exhibit sponsored by the Carbide Camera Club. The photographic prints will be displayed at the Children's Museum, beginning Sunday, January 15. The show will continue through February 15. The photographs, both black and white

and color, are all the previous winners in the annual club salon. The Museum, located at the corner of Highland Avenue and West Outer Drive, Oak Ridge, is open Sundays, 2 to 4 p.m. and Monday through Friday from 3 to 5 p.m. There is no admission charge.

Surplus sale set for January 18

Another surplus sale of used government-owned items is set for next month. Featured will be used office equipment and vehicles. Inspection may be made from 8:10 a.m. to 4 p.m. December 27, through January 17, including Saturdays, January 7 and 14.

The bids will be opened beginning at 9 a.m. January 18. The sales office is located in the Powerhouse Area, Building K-722, off State Route 58, Oak Ridge.

Additional information may be obtained from D. R. McCammon, extension 3-4601.

The Carbide Camera Club meets at Cheyenne Hall on the second Tuesday of each month at 7:30 p.m. January 10 is the next regular meeting, and visitors are welcome. Membership is open to all employees, retirees and their families. Additional information may be obtained from John Blankenship, extension 3-3533; or Lester Petrie, 3-1910.

next issue...

The next issue will be dated January 19. The deadline is January 11.

safety scoreboard

Time worked without a lost-time accident through December 28:

Paducah	159 Days	2,040,690 Man-Hours
ORGDP	28 Days	906,000 Man-Hours
Y-12 Plant	316 Days	9,754,000 Man-Hours
ORNL	247 Days	5,391,986 Man-Hours

question box

If you have questions on company policy, write the Editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

QUESTION: I would like clarification on the granting of sick and personal leave to salaried employees. Are doctors' and dentists' appointments considered time off with personal leave or sick leave? I have heard of it being done both ways.

ANSWER: Personal Leave Guidelines prescribe that medical or dental appointments which cannot be made during off hours, are the type absences that fall within the **personal leave** category. However, should an employee be absent or be sent off the job because of illness, subsequently visiting a doctor or dentist, this absence would be recorded as sick leave (nonoccupational disability expense symbol 17).

Progression time

QUESTION: What is the approximate time for progression from Draftsman Trainee to Senior Engineering Draftsman?

ANSWER: The time for advancement from Draftsman Trainee to Senior Engineering Draftsman is variable since it is based on the relative skills of individuals, and the rates of their development with the acquisition and use of additional job knowledge. The Senior Engineering Draftsman is a premium job and all individuals will not necessarily achieve this level.

Performance evaluation

QUESTION: Shortly after leaving the AMP program and going to the merit program, I found out that I was the lowest paid employee in my department. My foreman told me: "My recommendation was that you not be put on the bottom, but I was overridden."

My questions is, "Who can evaluate an employee better than his line foreman? Also, when an employee feels he has been given a higher than average job performance and finds he has been "stabbed in the back," how can he continue to have a healthy job attitude?"

ANSWER: Normally the person in the best position to evaluate an employee's work is his/her supervisor. A supervisor's evaluation of an employee is subject to review by his/her supervisor, but is not often rejected.

If your supervisor says someone else overrode his/her recommendations, you should ask who specifically overrode the recommendations. You have the right to talk to that individual along with your supervisor.

Vehicle use

QUESTION: I was interested in a recent Q & A in this space relative to unauthorized uses of government vehicles at ORGDP. The same thing occurred at North Portal, ORNL, and went on all summer. Young misses were picked up in the parking lots and driven to their jobs in government vehicles.

ANSWER: The use of government vehicles for portal-to-work transportation is not authorized at ORNL. Exceptions would be for medical or other legitimate reasons.

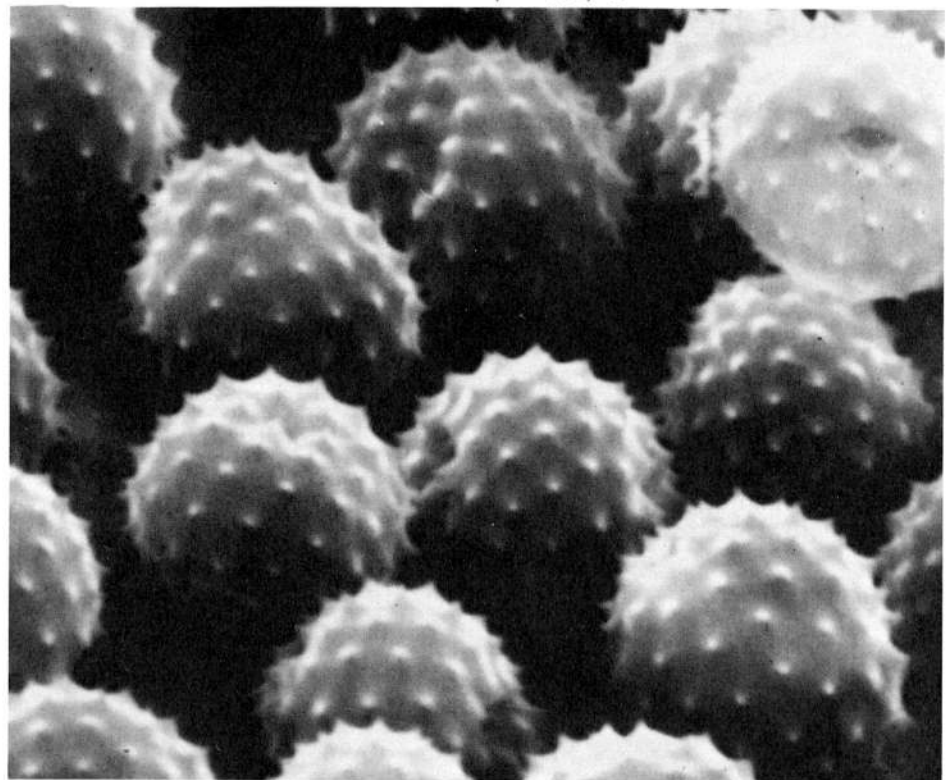
An investigation some months ago revealed there were minor infractions of transportation regulations. Corrective action was taken.

Secretarial bid

QUESTION: A new secretary was hired three or four months ago, replacing one who had resigned from a General Staff position. Should this job have been on a bid basis?

ANSWER: The incumbent who terminated was in a level 4 job, which under the Job Opportunity System should be bid. The organization with the opening and those responsible for the job evaluation reviewed the duties involved and determined that the job should really be classified as a level 3 one. The Job Opportunity System does not call for level 3 jobs to be bid, and, therefore, this job was not bid.

The Job Opportunity System is being reviewed in depth at the present time. The question you raise will be considered during this review.



RAGWEED POLLEN—If you've ever wondered why ragweed causes problems, take a look at what the pollen looks like magnified 3000 times. Robert K. Bennett, Y-12 Development Division, supplied this photomicrograph of the old country demon that gives so many people allergy problems.

retirements



William F. Hawkins
Y-12 Electrical
24 years service



Harvey L. Smith
Laboratory Protection
ORNL
32 years service



Francis A. DiCarlo
Physics, ORNL
33 years service



Temple A. Love
Neutron Physics,
ORNL
30 years service



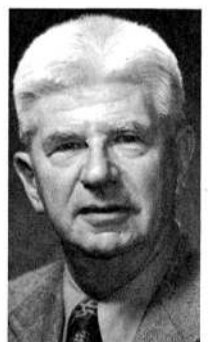
C. D. Cooper
Operations, ORNL
20 years service



Donald R. Ward
Operations, ORNL
28 years service



Robert A. McNees Jr.
Employee Relations,
ORNL
25 years service



Edward A. Davis
Plant and Equipment
ORNL
27 years service

Savings Plan—Personal Investment Account

	Fixed Income Fund	UCC Stock	Equity Investment Fund
December 75	11.9880	58.7886	7.8231
December 76	13.9554	59.2723	8.8167
September 77	13.9146	44.7254	8.0530
October 77	14.0104	42.5434	7.7151
November 77	14.0995	41.9255	8.0095

Note: Fixed Income Fund unit values reflect interest additions to achieve the guaranteed effective annual interest rate of 8.70% for 1977. Union Carbide stock values are the average cost of stock purchased during the month plus brokerage charges. Equity Investment Fund unit values represent the month-end market value of securities held by the Fund. The price of each unit is determined by dividing the total value of the securities by the number of units in the Fund.



Harry K. Walker
Engineering, ORNL
31 years



Johnny R. Keys
Plant & Equipment
ORNL
29 years service



Lennie C. Jeffreys
Y-12 Chemical
Services
26 years service

Carbide bowling. . .

Y-12 C League. . .

The Mini-Strikes continue to hold the lead over the Rounders. Don Troutman topped John Johnson's 696 for the series high with an outstanding 718 handicap.

Y-12 Classic. . .

The Splinters won the first half in the Y-12 Classic League. The Mets won the weekly high handicap game with 1090. Bill Maddux rolled a 230 for high scratch game, while Bill Patrick had the high scratch series with 599.

K-25 Tuesday. . .

The City Slickers have run away in the K-25 Tuesday Night League leading by 40 points. J. R. Cravens won top honors last week winning high scratch game, 243/273 handicap. He also won high series 596/689 handicap.

Carbide Family. . .

The Oops and Double Trouble were tied for first place during the week of December 9. John Patton rolled the high scratch series with a 577 for men while Mary Hawkins rolled 573 scratch series for women.

Y-12 Mixed. . .

The Friskies won first place in the first half of the Y-12 Mixed League. Bits & Pieces won second and the Roll-Aids came in third.

Carbide Shifters. . .

The B. T. Express won four to become the new leaders of the second half in the Shifters League. Sam Babb and Jackie McIntyre still hold the lead for high scratch series for men and women.

ORGDP Women's. . .

The Uptowners continue to lead the ORGDP Women's League this week. Myrtle Cowan was the bowler of the week rolling a 226-200-197-643 handicap series.

ORNL A League. . .

The Dynamics won the first half of the season over the Half Frames in the ORNL "A" League. The Fireballs rolled a 3000 handicap series for the weekly high.

ORNL C League. . .

The Alley Rads finished first this half in the ORNL "C" League. The Remkeys were second followed by the Damagers for third. Davy, from the Knuckleheads, rolled the high game of the week with a 247 handicap.

patents granted. . .

To Billy E. Foster, ORNL, for "Method of Simulating Spherical Voids for Use as a Radiographic Standard."

Happy children crowd parties to make holiday season bright

Approximately 4,000 Union Carbide offsprings crowded the four parties held December 22 at the Oak Ridge High School. A chimpanzee act, plus puppets added to the glow of the visit with Santa Claus. Two children, Jennifer and Jamie Howard, had flown from Japan to spend the holidays with their grandfather, Y-12's fire and guard chief, Winfred O. Elam, who retired last week.



'the party's over'



Jingle Bell jitterbug



'Up on the rooftop. . .'



'Button up your overcoat'



'Ride 'em, cowboy'

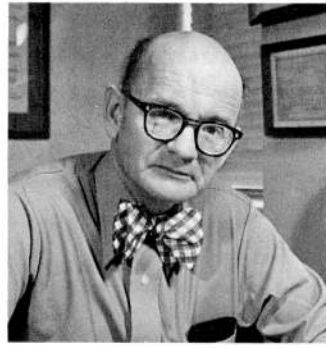


Turning on that old Santa charm

Medicine Chest...

Control of diabetes

by T. A. Lincoln, M.D.



(Editor's Note: Dr. Lincoln alternates his regular column with "Medicine Chest," where he answers questions from employees concerning health matters. Questions are handled in strict confidence, as they are handled in our "Question Box." Address your question to "Medicine Chest," Nuclear Division News, Building 9704-2, Mail Stop 20, or call the news editor in your plant.)

QUESTION: "How important is good control of diabetes in the prevention of complications?"

ANSWER: In an editorial in the *New England Journal of Medicine*, April 29, 1976, Drs. George F. Cahill from the Harvard Medical School, Donnell Etzwiler from the University of Minnesota and Norbert Freinkel of Northwestern University made the following statement: "In summary, current clinical and experimental data clearly demonstrate that optimal regulation of glucose levels should be achieved in the treatment of diabetes, particularly in young and middle-aged persons, who are at greatest risk of the microvascular complications." The above statement was accepted as policy by the American Diabetes Association (ADA).

Insulin therapy

In the May 5, 1977, issue of the same journal, an equally distinguished group of diabetes specialists, led by Dr. Marvin Siperstein of the University of California, disagreed. They said, "...we have yet to find clear evidence that insulin therapy, as currently applied, has altered the course of the microangiopathic lesions of diabetes." They concluded that physicians should be cautious in interpreting and applying the ADA statement. "Physicians must weigh the possible beneficial effects of aggressive insulin therapy against the known effects of excessive hypoglycemia (low blood sugar), particularly since there is no guarantee that treatment will prevent or minimize complications."

Does that leave the diabetic patient in the middle of the controversy? Possibly yes, but more likely no. Neither group condones sloppy or indifferent control. Dr. Siperstein recommends the best possible control of blood glucose—but not at the price of frequent hypoglycemic attacks (insulin "reactions").

Obsessive control can have serious psychological and pathological effects. Life becomes a struggle and hypoglycemia an ever-present threat. No insulin-dependent diabetic can achieve perfect control, no matter how hard he or she tries. Even by taking regular insulin injections before each meal and possibly even at bedtime, the blood sugar will not be controlled as closely as it is in normal healthy people.

An extremely rigid diet is also not the answer. The blood sugar varies with the amount of total calories in the

food consumed, the amount of exercise taken, the presence or absence of other factors such as infection or psychological stress and, of course, the amount of insulin injected. The secret is to balance all these as intelligently as one can to maintain optimum weight, nutrition and fitness.

Diet not only answer

After years of experience, many insulin dependent diabetics do well on ad lib diets, checking the glucose level in the urine and getting adequate exercise. They eat approximately the same amount each day on a fairly rigid mealtime schedule. When circumstances interrupt their "ideal" pattern, adjustments are made. An injection of a small amount of supplemental regular insulin is used to overcome a bad judgment in eating which led to a too high blood glucose level. Snacking between meals is used to combat too much insulin. These manipulations have to be done with considerable skill or too many insulin reactions will occur.

Mild diabetics—80 percent of whom are overweight—usually don't require insulin. They need only to get their weight down to ideal levels, avoid caloric excesses and get adequate exercise.

If diabetics can keep their blood glucose within reasonable limits, they will feel better, have fewer infections and may delay or prevent coronary heart disease and peripheral vascular disease. They should not expect that meticulous control will delay or prevent the eye or kidney complications. These problems represent a more severe form of the basic disease but fortunately are inevitable in only a few. Many diabetics have lived full and happy lives for over 50 years taking insulin every day. Most of them probably succeeded because they learned to live with their disease and "controlled" it intelligently.

ORNL Ladies...

The Mousechasers ended victorious over the Avengers in the ORNL Ladies League for the first half. Terry McPeters rolled the weekly high scratch series with a 503.

Monday Mixed...

The Four Eagles lead was cut to eight games over the Roadrunners, with only two weeks remaining in the



GLEAMING NEW STRUCTURE—The Y-12 Credit Union was the first one in Tennessee to own its new building. . . now look! The old building, to the right, long since has been too small, too crowded. . . so the Y-12 credit group now occupies its new building on Lafayette Drive, Oak Ridge. The five-story brick and glass building is about half-occupied by the Y-12 Credit Union, with an option to rent the remaining space, then use as expansion demands.

Credit unions set annual meetings for all members

Mention a Nuclear Division plant in Oak Ridge or Paducah, and you can immediately name its credit union. There have been credit unions almost as long as there have been plants.

With combined assets nearing 100 million dollars, all four credit unions are gearing for annual meetings for members. Each credit organization urges participation by its members in the way it does business. Self-management is the hallmark of a good credit union, one manager said.

Following is a summary of schedules for the four groups. Additional information will be published as it becomes available.

Y-12 PLANT

Thursday, February 9, is the annual meeting for the Y-12 Employees Federal Credit Union. It is set at 7 p.m. at the Oak Ridge Civic Center.

To be elected are three directors and one credit committee member. There will also be reports from various committees in the organization. Door prizes and entertainment are featured, as well.

PADUCAH

The C Plant Credit Union will have its annual meeting Sunday, January 22, at 1:30 p.m. at the Paducah Civic Center.

Elections will center on the board of directors and the credit committee. Door prizes consist of a grand prize of a \$100 bill; and twenty \$20 bills.

All members are urged to attend.

ORNL

ORNL Employees Federal Credit Union has set its 30th annual meeting at the Oak Ridge Civic Center, Thursday, January 26.

Elections will be held for four positions on the board of directors and three on the credit committee. All members attending will be eligible for a number of \$20, \$50 and \$100 cash door prizes. Shift workers who are scheduled to work the evening of the meeting may also become eligible for prizes by registering in person at the main office of the credit union on the day of the meeting.

Registration is in the Shep Lauter Room, beginning at 6:30, with the meeting set for 7:30 p.m.

ORGDP

The K-25 Employees Federal Credit Union has set its annual meeting for Wednesday, February 1, beginning at 7:30 p.m. at the Oak Ridge Civic Center.

There will be an election of three directors and one member of the credit committee, with reports from various committees of the year's activities.

Door prizes will be announced later.

half. It looks as if the Four Eagles will win. Second place still remains a toss-up.

Skeet League...

Alan VanHull, Y-12, took top honors during November in the Carbide Skeet League shooting a 49.482. Helen Raaen was second with a 47.280, followed by Vernon Raaen for third with a 45.830.

ORGDP Maintenance Division sets safety records in mid-November

PH 77-4753



PRAISE FOR SUPPORT—Representatives from the Maintenance Division at ORGDP receive plaudits for their contributions to the recent safety milestone, passed in mid-November. From left are Leonard K. Barding, Thomas J. Knox, Roy H. Duncan, Milo P. Gresham, Bobby L. Powers, William O. Goforth, Thomas L. Penson, Larry A. Dean, division superintendent; Paul E. Hudson, Earmel W. Bean, James L. Ramsey, Virgle E. Copeland and William V. Williams.

In mid-November, the Maintenance Division at ORGDP had operated 459 days—or 5,383,933 man-hours—since the last disabling injury.

This achievement breaks an all time record of 2,550,313 hours, set in 1976.

This successful program is a result of the basic good safety attitude of the people and the maintenance of an effective divisional safety program. These programs include interesting and motivating safety meetings, effective audit and inspection programs, formal and informal training sessions and continuing promotion safety activities throughout the division.

The Maintenance Division has demonstrated they will be satisfied only when the injury rate is zero. They also realize that further improvement will probably be more difficult than ever. However, with good job planning and complete safety awareness from all employees, greater safety goals can be reached in the future.

New Year resolutions. . .

(Continued from page 1)

Milica "Micha" Petek, research associate in ORNL's Solid State Division, says: "I don't make New Year's resolutions because I don't want to break them! Since I set goals during the year, I don't need a special time at the new year to establish them." She adds, "There is so much to do during the holiday season without setting aside extra time to make a list of resolutions."

Voris Jerrell, a process foreman in the Power, Utilities and Chemicals Division at Paducah, gets philosophical in his resolution.

"I will try to keep in mind how good this life is and not let little problems get the upper hand. Try to treat my fellow employees as I would have them treat me, and try to start each day with a sunny attitude."

Rachel Smith, Operating Contractor's Project Office, ORGDP, has an interesting one. "I'm attending Roane State Community College and plan to study harder and make the dean's list; and to beat my husband, Doug, in a tennis match."

From Y-12's Visitor Control, **Jeff Derwort** states he plans to start going to church every Sunday. Derwort had other aspirations, but said if he fulfilled that one, it would take care of some of the others.

Betty Powell, Uranium Resource Evaluation Project, ORGDP, plans to "organize and utilize time more wisely, both at home and at work. I'm going to try to be more conscientious about proper nutrition and exercise; and I am going to put forth a great effort to understand other people."

"I have made this one before, but really am going to try again. I plan to stop biting my fingernails," resolves **Gary A. Riser**, General Accounting Division.

Adrian W. Conner, a guard in Paducah's Employee Relations Division, lists five noteworthy goals.

"1. Eat less. 2. Quit smoking. 3. Work harder. 4. Be more considerate of other people. 5. Try to live to be older."

A couple of noteworthy goals are listed by **Cal W. Lunsford**, Research Services, Y-12:

"I plan to quit smoking in 1978. Sure, I can control it now, but that's not good enough. I want to quit altogether. Also, I hope to make 1978 a safe year. Those two almost go hand in hand."

From Special Projects Group in the Operations Division at ORGDP, **J. A. Bryant**, says: "Beginning January 1, I plan to take more time for myself and

indulge in a few hobbies and personal interests."

Howard E. Lee, supervisor of the ORNL Cafeteria, has made three resolutions for 1978:

"1) I'd like to play tennis as much and as often as I can; 2) I will take a more active part in the Karns community civic activities; and 3) I want to shed a few pounds, then maintain my weight level."

Last firewood cuttings of season

The last two public firewood cuttings of the season will be held on January 13, 14, 27 and 28. Those interested in participating should meet in the parking lot on Bethel Valley Road, east of the main entrance to ORNL (across the street from the new Holified Heavy Ion tower).

For more information call Dennis Bradburn at 3-1266, or the Public Relations Department, 3-6421.

Hood promoted



5967-77

The appointment of W. Bryan Hood as supervisor of Material Services at ORNL has been announced by W. Ron Ragland, director of the Finance and Materials Division.

In his new position, Hood will be responsible for the financial aspects of ORNL's Stores inventory, and for all accounting, clerical, requisitioning, keypunching and cataloguing functions of the Materials Department.

A graduate of Tennessee Technological University, he received his B.S. degree in business management in 1956.

He and his wife, Dawn, live at Route 4, Rockwood. They have a daughter, Suzanne.



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